Appendix V

Public Involvement Plan

Revision No.: 6

February 2008

Federal Facility Agreement
and Consent Order
(FFACO)

FFACO
Public Involvement Plan

U.S. Department of Energy
National Nuclear Security Administration
Nevada Site Office
Las Vegas, Nevada

U.S. Department of Defense
Defense Threat Reduction Agency
Detachment 1, Nevada Operations
Mercury, Nevada

U.S. Department of Energy
Office of Legacy Management
Grand Junction, Colorado

Preface

The Public Involvement Plan serves two purposes: it provides a broad public involvement strategy, and fulfills requirements contained in the *Federal Facility Agreement and Consent Order* (FFACO) relating to public awareness and participation. Under the FFACO, agreed to by the State of Nevada, U.S. Department of Energy, Environmental Management (DOE/EM), the U.S. Department of Defense (DoD), and the U.S. Department of Energy, Legacy Management (DOE/LM), sites and facilities potentially contaminated by past DOE and DoD activities must be effectively investigated and corrective actions established to protect public health, safety, and the environment. The Plan, which is incorporated into the FFACO as Appendix V, is a key resource for gaining information on public participation options that relate to DOE and DoD environmental restoration and waste management activities.

Table of Contents

Table of Contents *(continued)*

List of Figures

List of Acronyms and Abbreviations

The Federal government commonly uses acronyms in its publications and operations. Acronyms are words formed from the first letter of each major part of a compound term. For example, the National Nuclear Security Administration is typically shortened to NNSA. Acronyms are an effective means of communication, but only when readers are familiar with the representative terms. Below is a list of acronyms used in this document:

CAB	Community Advisory Board
CADD	Corrective Action Decision Document
CAP	Corrective Action Plan
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CNTA	Central Nevada Test Area
DoD	U.S. Department of Defense
DOE	U.S. Department of Energy
DTRA	Defense Threat Reduction Agency
EA	Environmental Assessment
ElS	Environmental Impact Statement
EM	Environmental Management
FFACO	*Federal Facility Agreement and Consent Order*
FFCAct	*Federal Facility Compliance Act of 1992*
FFCAct-CO	*Federal Facility Compliance Act-Consent Order*
LM	Legacy Management
NEPA	*National Environmental Policy Act of 1969*
NSO	Nevada Site Office
NTS	Nevada Test Site
RCRA	*Resource Conservation and Recovery Act of 1976*
SAFER	Streamlined Approach for Environmental Restoration
TRU	Transuranic
TTR	Tonopah Test Range

1.0 FFACO Overview

The *Federal Facility Agreement and Consent Order* (FFACO) is a legally binding document that was agreed to by: the State of Nevada; the U.S. Department of Energy, Environmental Management (DOE/EM); the U.S. Department of Defense (DoD); and the U.S. Department of Energy, Legacy Management (DOE/LM). In summary, the agreement outlines a process to ensure that the DOE and/or the DoD, under the regulatory authority and oversight of the Nevada Division of Environmental Protection (NDEP), thoroughly investigate and take corrective actions concerning the release of hazardous pollutants at certain federal facilities owned or operated by DOE and/or DoD.

Signed in 1996, the FFACO:

- Formalizes relationships among the State of Nevada, DOE, and the DoD;
- Identifies sites of potential historic contamination and prioritizes them for cleanup;
- Defines the regulations the State of Nevada will use to direct and enforce corrective action activities;
- Establishes a corrective action strategy for cleanup activities; and
- Provides public involvement opportunities.

The FFACO is regulated for the State of Nevada by the Nevada Division of Environmental Protection. The requirements of the FFACO are managed for the DOE by DOE/EM and DOE/LM, and for the DoD by the Defense Threat Reduction Agency. Descriptions of public involvement opportunities for each organization's environmental restoration and FFACO activities are provided in the following chapters.

2.0 U.S. Department of Energy Environmental Management

2.1 Environmental Management Overview

In 1989, the U.S. Department of Energy (DOE) in Washington, DC. created the Office of Environmental Restoration and Waste Management, now called the Office of Environmental Management (EM). The EM Program was instituted at DOE field offices around the country to address the environmental liabilities of 50 years of nuclear weapons production in the United States. The EM Program at the U.S. Department of Energy, National Nuclear Security Administration Nevada Site Office (NSO), formerly known as the U.S. Department of Energy, Nevada Operations Office (DOE/NV), is part of that effort. It is the responsibility of EM to determine the risk and future cleanup costs associated with environmental contamination, hazardous and radioactive materials and wastes, and contaminated buildings and facilities that are the result of past testing and research activities.

Most NSO EM projects are carried out at the Nevada Test Site (NTS) and the Tonopah Test Range (TTR) which is part of the Nevada Test and Training Range (formerly known as the Nellis Air Force Range). Located in Nye County, the NTS is a unique national resource (see Figure 1). The approximately 1,375-square mile site is located about 65 miles northwest of Las Vegas. The NTS is larger than the state of Rhode Island, making it one of the largest restricted access areas in the United States. This remote and arid site is predominantly surrounded by tightly controlled federal lands and facilities. The Nevada Test and Training Range provides a buffer zone on the east, north, and most of the west border of the NTS, and the Bureau of Land Management land provides a buffer zone on the south and southwest border (see Attachment 1 for an overview of the NTS).

The NSO EM Program elements under the purview of the FFACO are the Environmental Restoration and Waste Management Projects. These projects have separate yet interrelated roles and responsibilities which are detailed in Section 2.1.1 and 2.1.2 of this Plan. Under the NSO EM Program, the projects operate with the common goals of soliciting and incorporating public comments into the decision-making process, protecting human health and safety, emphasizing environmental responsibility for NSO activities, and complying with all applicable laws and regulations affecting program activities.

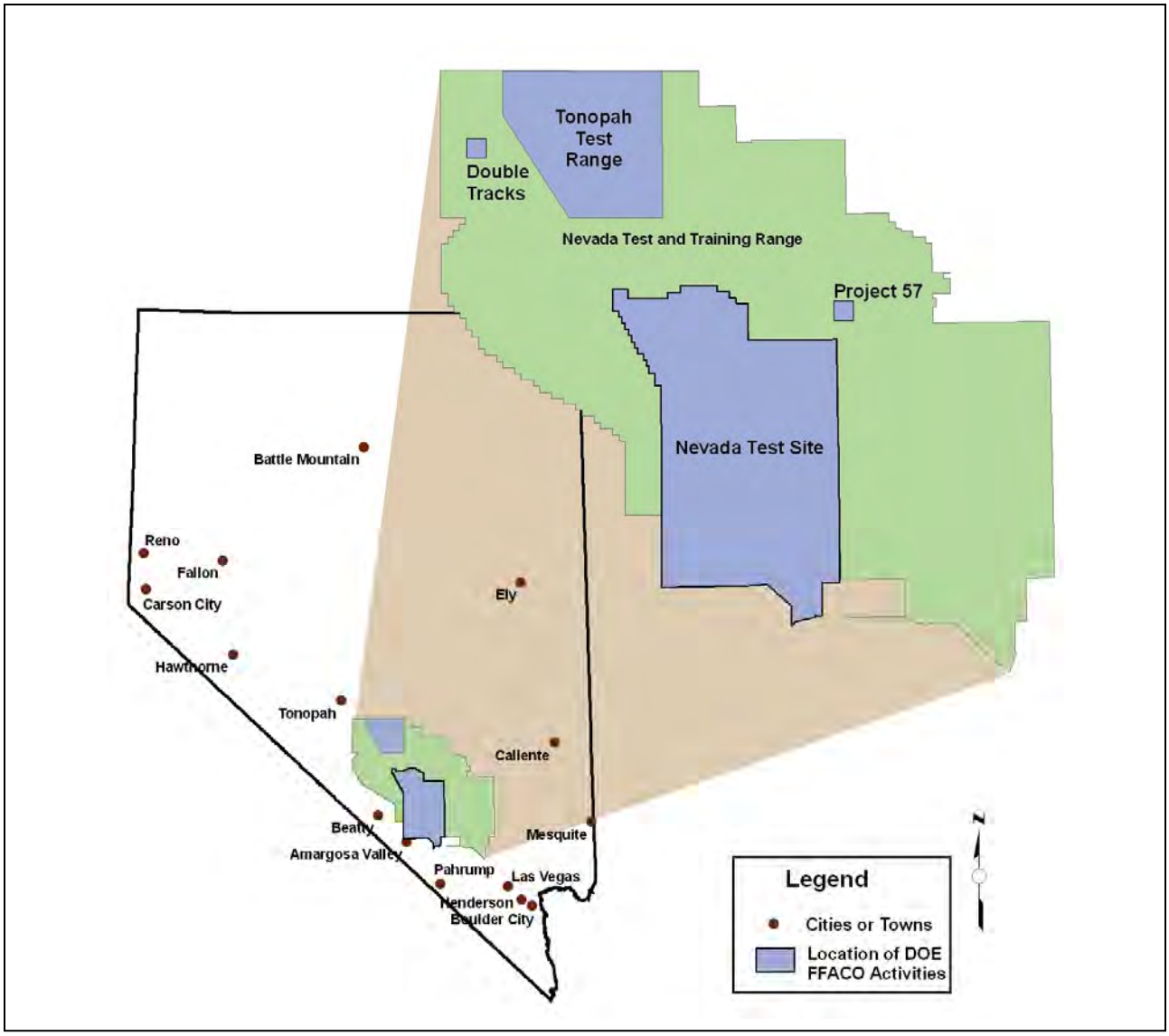

Figure 1 – Nevada Test Site and Surrounding Areas

The laws, regulations, and NSO/State of Nevada agreements with specific requirements for public interactions include the following:

- *National Environmental Policy Act* (NEPA)
- *Resource Conservation and Recovery Act* (RCRA)
- *Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)*
- *Federal Facility Compliance Act* (FFCAct)
- *Federal Facility Agreement and Consent Order* (FFACO)

A more detailed description of environmental regulations is provided in Section 2.3.

2.1.1 Environmental Restoration Project

The NSO EM Environmental Restoration Project addresses contamination from historical nuclear weapons programs at NSO facilities and sites. The contamination resulted from nuclear testing and related support operations, nuclear rocket experiments, and non-nuclear experiments. Contaminants include radioactive materials, unexploded ordnance, gasoline, oils, solvents, and heavy metals such as lead.

Environmental Restoration Project objectives are to identify the nature and extent of the contamination and assess the potential risk the contamination poses to the public and the environment. About 2,500 potential environmental restoration sites have been identified to date and range from locations where car batteries have been discarded to craters formed by underground nuclear tests. Major environmental restoration activities include:

- ***Groundwater studies*** – This sub-project characterizes the effects of historic underground nuclear detonations at the NTS to generate models for groundwater flow and radionuclide transport. The models will be used to determine contaminant boundaries and a future groundwater monitoring network (see Figure 2).

- ***Soils remediation studies*** – This sub-project characterizes contaminated surface and shallow subsurface soils on the Nevada Test Site and the Nevada Test and Training Range, including the Tonopah Test Range. Depending on the results of the characterization and planned land use scenarios, an appropriate remediation activity is then conducted (see Figure 3).

- ***Industrial Sites*** – This sub-project characterizes and remediates historic nuclear testing support sites including disposal wells, inactive tanks, contaminated waste sites, inactive ponds, muck piles, spill sites, drains and sumps, and ordnance sites (see Figure 4 and Figure 5). Industrial Sites activities also include the deactivation and decommissioning of NTS facilities that are no longer used, will not be used in the future, and are known or suspected to be contaminated. After contamination levels have been identified and contaminants stabilized, contained, or removed, the facilities are sealed, dismantled, or converted for non-nuclear uses. Industrial Sites are located on the NTS and TTR.

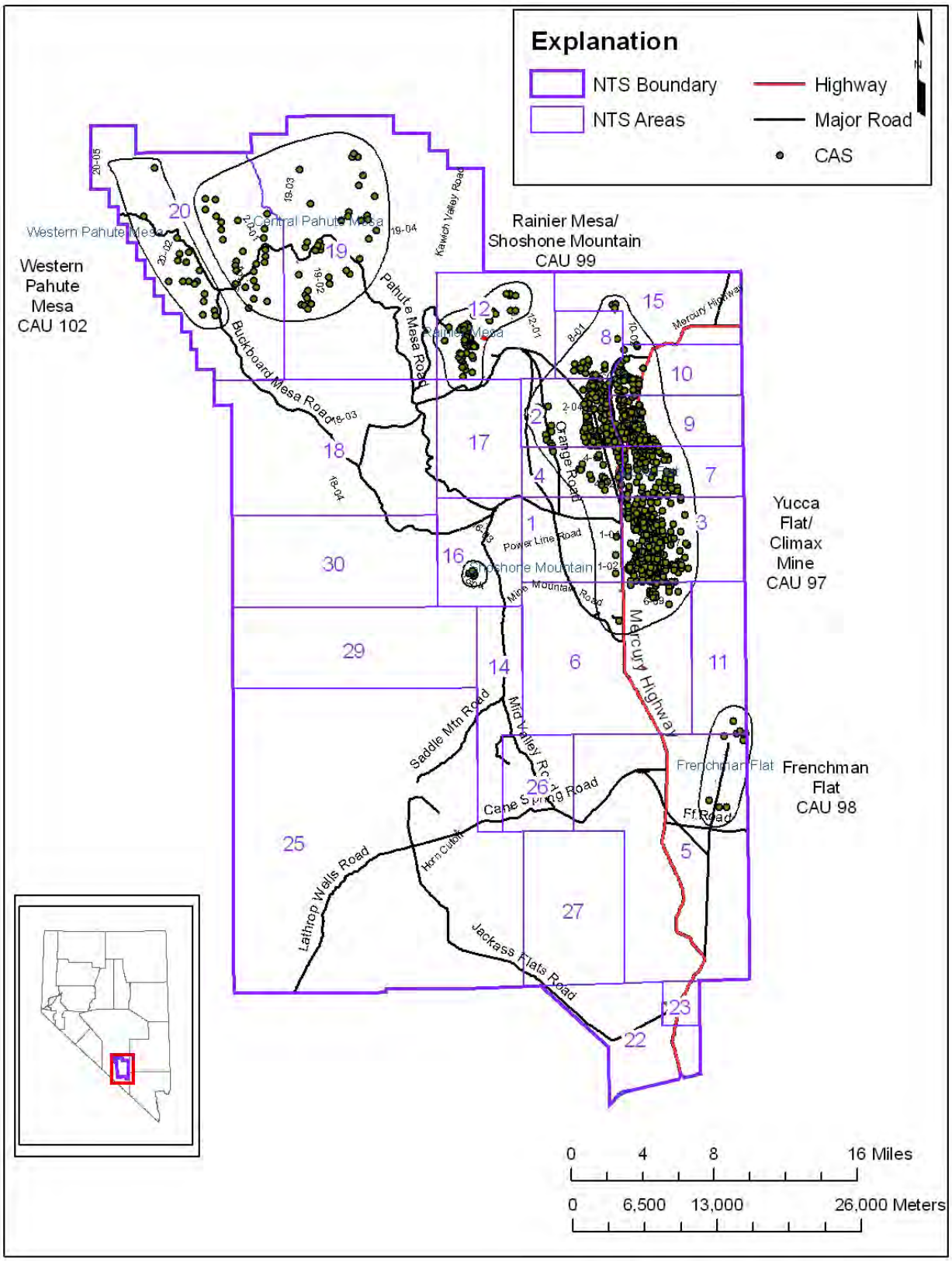

Figure 2 – Underground Test Area (UGTA) Corrective Action Sites (CAS) and Corrective Action Unit Boundaries

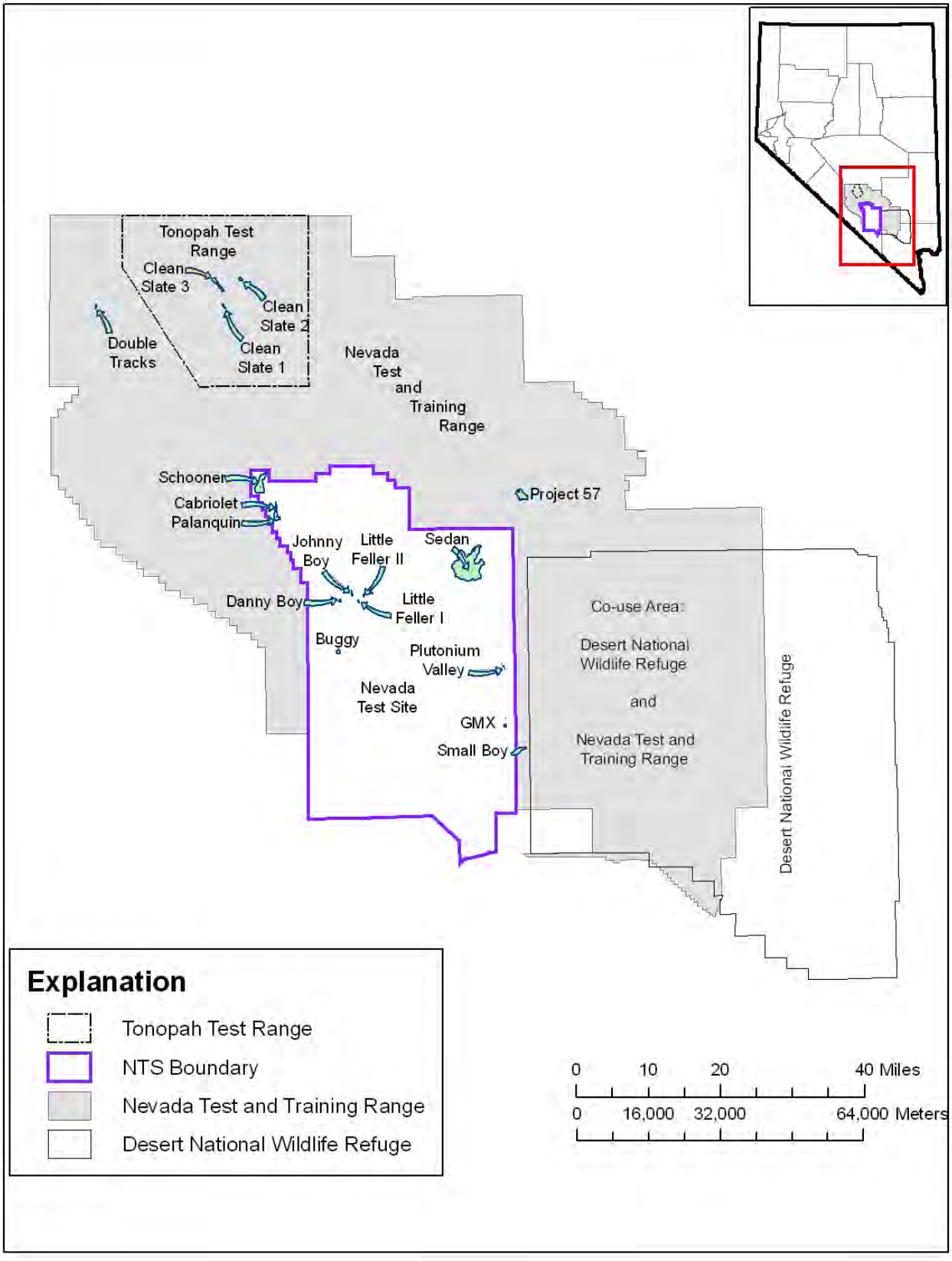

Figure 3 – Areas of Surface Soil Contamination

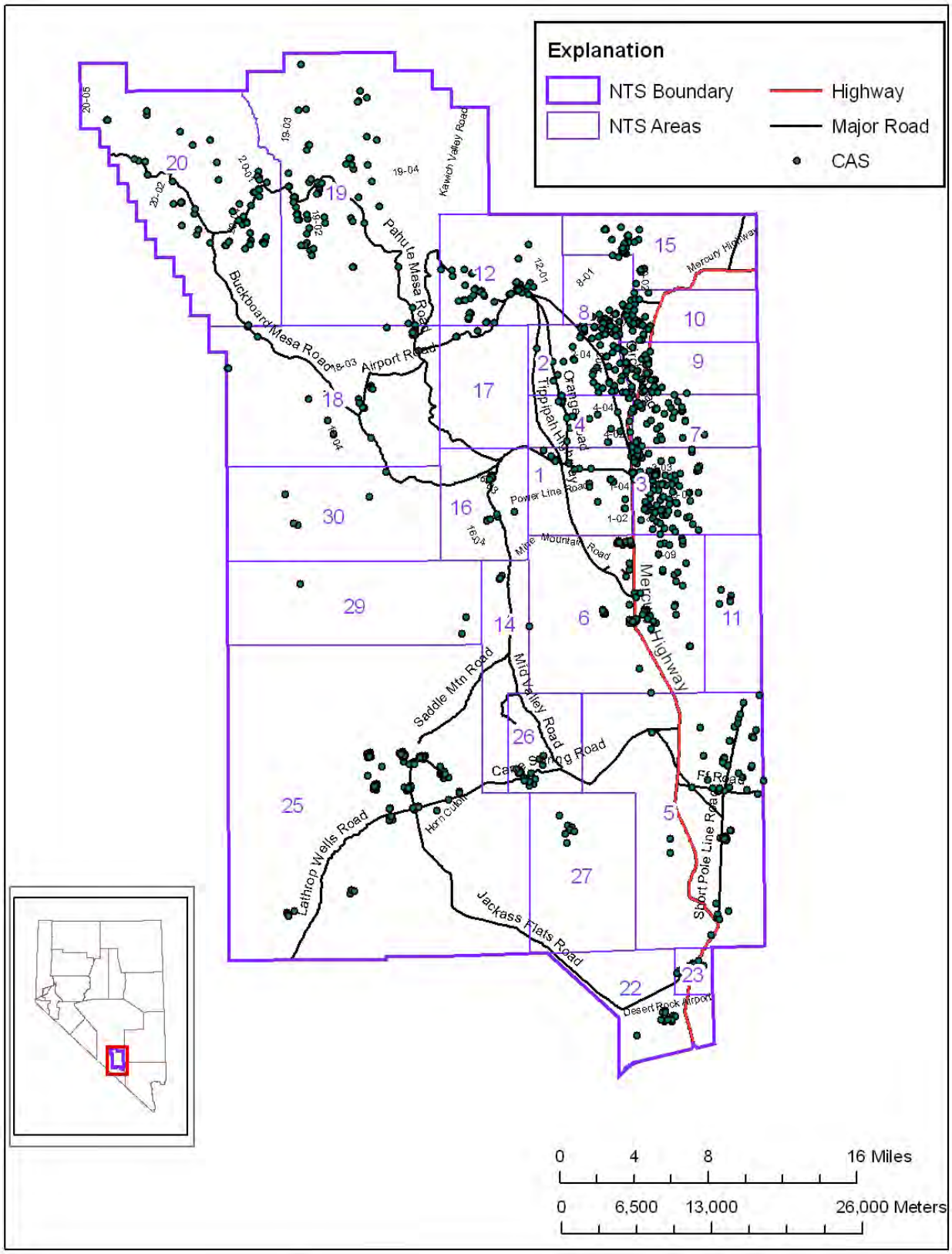

Figure 4 – Industrial Sites Corrective Action Sites at the NTS

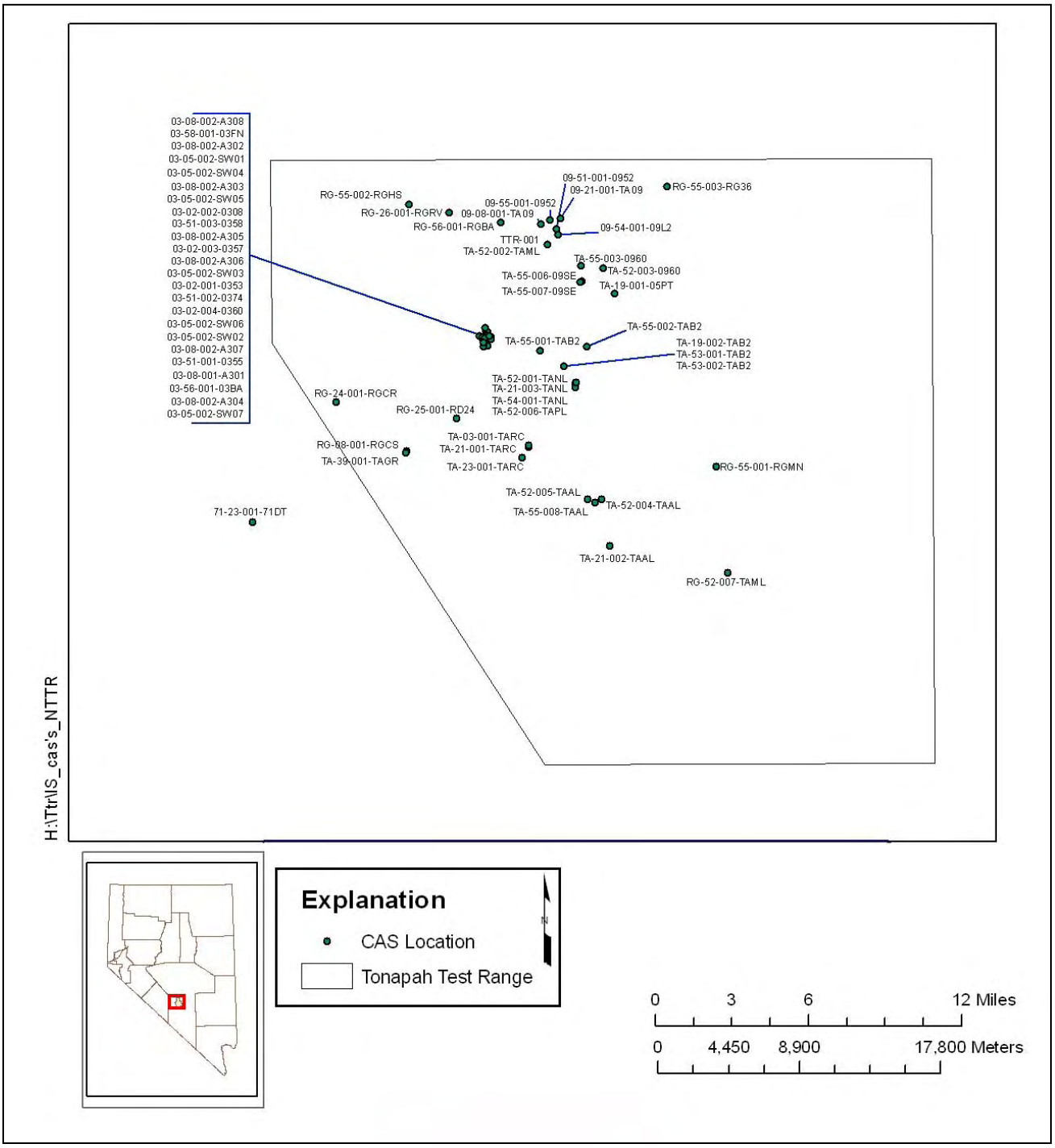

Figure 5 – Industrial Sites Corrective Action Sites at the TTR

2.1.2 Waste Management Project

The Waste Management Project is responsible for the management and disposal of low-level and mixed low-level radioactive waste from the NTS and other approved DOE and DoD facilities. The Waste Management Project also temporarily stores hazardous and transuranic waste prior to treatment and/or disposal. The objective is to protect the environment and the public's health while minimizing, treating, storing, and disposing of waste generated at DOE sites.

The above mentioned waste types are currently managed at the Area 5 Radioactive Waste Management Site located on the NTS. Engineered and excavated cells are currently used for the disposal of low-level and mixed low-level radioactive waste. Under an agreement with the State of Nevada, transuranic waste is also temporarily stored at the Area 5 Radioactive Waste Management Site until it is shipped off-site. The ultimate disposal destination for the transuranic waste is the Waste Isolation Pilot Plant near Carlsbad, New Mexico. Hazardous waste is accumulated at the NTS and shipped off-site to a RCRA-permitted treatment, storage, and disposal facility.

Related waste management activities include the following:

- ***Radioactive Waste Acceptance Program –*** This program ensures that approved generators sending low-level and mixed low-level radioactive waste for disposal at the NTS are capable of characterizing, managing, and transporting radioactive waste in a compliant manner.

- ***Performance Assessment –*** An assessment and characterization program determines the suitability of NTS sites for waste management activities. NTS waste management sites are closely monitored to make sure that wastes are properly contained within the disposal cells and that contamination is not released or spread beyond disposal site boundaries.

- ***Emergency Response Training –*** Highway accident response training for radiological emergencies is conducted through specially designed courses for federal, state, and local emergency personnel.

- ***Transportation –*** The Waste Management Project is responsible for the safe, efficient, and cost-effective packaging and transportation of NSO materials, such as radioactive and hazardous materials and wastes. Other responsibilities associated with transportation include preparing and analyzing transportation data in support of local transportation and stakeholder outreach efforts. The NSO is not responsible for the transportation of waste to the NTS from off-site generators. However, NSO EM encourages approved low-level and mixed low-level radioactive waste generators and their contractors to use transportation alternatives that would further minimize radioactive risk, enhance safety, and address public concerns. Other national decisions outside the scope of NSO are not covered by this Plan.

Specific waste types include the following:

- ***Low-level radioactive waste*** is the most common type of radioactive waste disposed at the NTS, typically consists of soil, rags, papers, equipment, solidified sludge, concrete, building materials, and discarded protective clothing contaminated with low levels of radiation. Low-level radioactive waste is currently disposed at the Area 5 Radioactive Waste Management Site located with in the boundaries of the NTS (see Figure 6). The total amount of low-level waste disposed at the NTS through September 2007 is approximately 35 million cubic feet.

- ***Mixed low-level radioactive waste*** contains both radioactive and hazardous components. NSO EM currently operates a Mixed Waste Disposal Unit at the Area 5 Radioactive Waste Management Site which is regulated by the State of Nevada Division of Environmental Protection under interim status. Conditions set forth in the December 2005 NTS Resource Conservation and Recovery Act Part B Permit require that this Unit be limited to the disposal of 20,000 cubic meters and close within five years, whichever comes first.

- ***Transuranic waste*** contains radioactive isotopes heavier than uranium, thus the term "trans" (or "beyond") uranium. This type of waste is produced during reactor fuel assembly, nuclear weapons production, and fuel reprocessing operations. Transuranic (TRU) waste radioactivity decays very slowly and requires long-term isolation. The NTS temporarily stores legacy transuranic waste in the TRU Pad cover building. DOE disposes transuranic waste at the Waste Isolation Pilot Plant near Carlsbad, New Mexico. Through calendar year 2007, the NTS shipped 1,860 drums of transuranic waste, in 48 shipments, to the Waste Isolation Pilot Plant for permanent disposal.

- ***Hazardous waste*** consists of toxic, reactive, or ignitable substances. Hazardous waste is not radioactive and includes materials such as waste chemicals, fuels, and paints. Hazardous waste stored at the NTS is sent off-site to licensed, commercial facilities for recycling, incineration, or disposal. If the waste contains explosive materials, it is treated on-site at the Explosive Ordnance Disposal Unit.

- ***Sanitary waste*** contains no hazardous or radioactive components. The NTS handles its own solid and liquid wastes using landfills and water treatment facilities similar to those found in metropolitan areas.

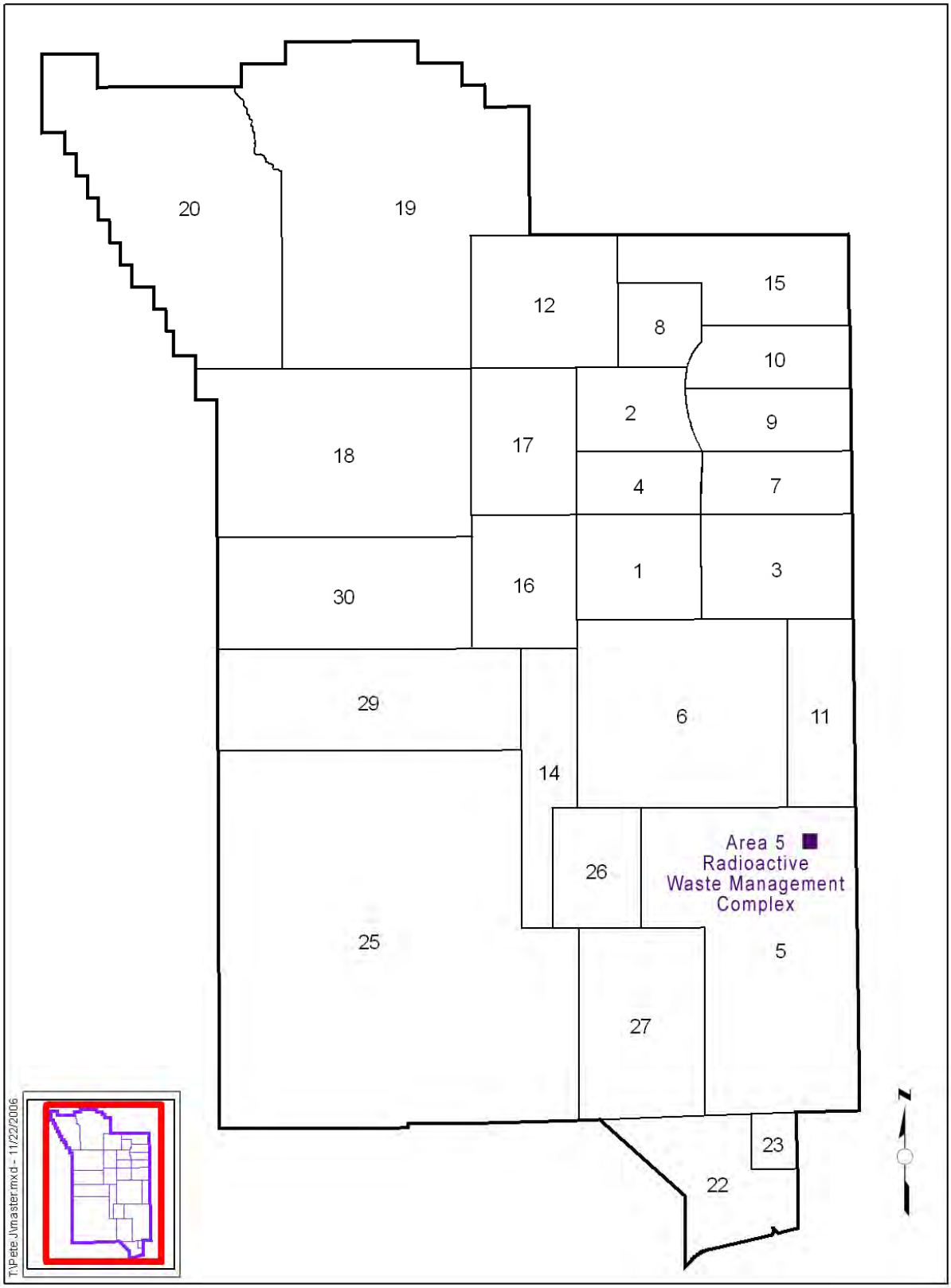

Figure 6 – Area 5 at the NTS

2.2 Public Involvement Strategy

2.2.1 Strategic Overview

Public involvement has taken many forms since testing began at the NTS. From the publicity surrounding the atmospheric tests in the 1950s, to the protests that have occurred since, the public has expressed an ongoing interest in activities at the NTS. At a national level, the Openness Policy, enacted by the former Secretary of Energy, Hazel O'Leary, in December 1993, paved the way for the declassification and availability of information and materials. The policy inspired further changes at the local levels. In 1994, DOE/NV (now NSO) conducted formal community interviews to establish a dialogue with the public. The interviews helped identify participants' key concerns, attitudes, knowledge, and understanding of the EM Program at DOE/NV (now the NSO). This information was candid and helpful, setting in motion a number of programs that would appeal to diverse audiences with different informational needs and interests. The addition of the Community Advisory Board (CAB) for Nevada Test Site Programs and regular CAB meetings provided additional opportunities for public input.

2.2.2 Participation Levels

People have demonstrated varying levels of interest in NSO activities. Some individuals have specific interests and attend meetings or request materials only when the related topics address those interests. Others are satisfied to receive information through television coverage and newspaper articles. Still, there are others who take on a more active approach by joining an outreach effort and/or volunteering to serve on the CAB or on one of the Board's committees.

This public interest and involvement has been categorized at four basic levels (see Figure 7). These levels are divided as aware, informed, involved, and highly involved, and are defined as follows:

- ***Aware*** - Broadcast and print media are usually the first place people turn to get current, issue-oriented information. This helps increase awareness of events and activities taking place at the NTS. To facilitate this flow of information, personnel prepare news releases, schedule news conferences, conduct media interviews, and place advertisements in local newspapers. The CAB public outreach effort makes additional information available to the general public concerning topics that are covered at CAB meetings relating to various NSO EM Programs

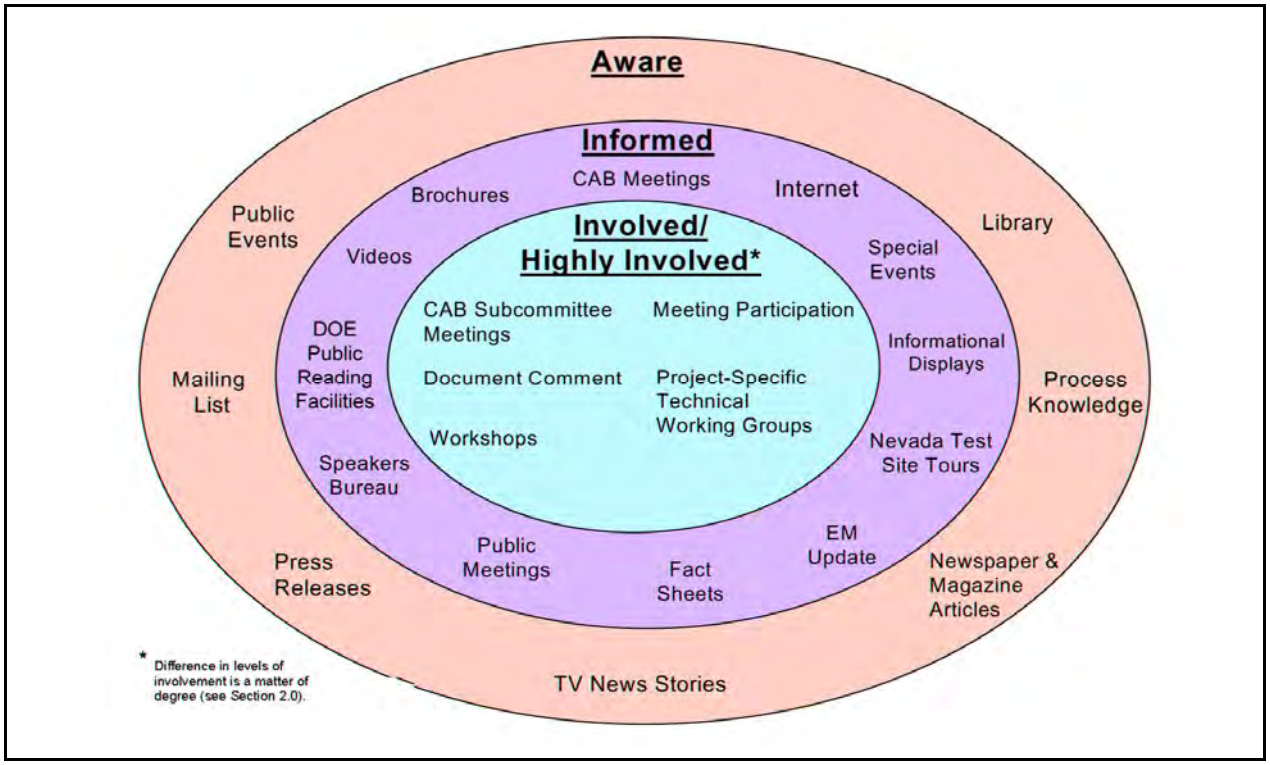

Figure 7 – Levels of Public Involvement

- ***Informed*** – Those individuals who actively seek out information on a particular topic, subject, or program fall into the category of wanting to become informed. Information can be attained by attending a public meeting; requesting to be added to the mailing list to receive notices of upcoming meetings or events, or to receive specific informational materials such as the EM Update publication; reading topical fact sheets, publications, and brochures; browsing NSO EM Internet sites; requesting displays for special events; touring the NTS; and requesting guest speakers for meetings, conferences, and luncheons.

- ***Involved*** – When attending meetings or reviewing written materials, a person is inspired to dig deeper or find answers to questions; he/she has entered the involvement phase of public participation. The search for more specific answers might result in people voicing their opinions at public meetings, participating in workshops, or serving on committees such as those offered by the CAB. Involvement requires a personal commitment and the willingness to devote free time to participate in meetings and read background materials.

- ***Highly Involved*** – When a stakeholder or organization invests the time and effort to attend public meetings and review the result of research projects in order to contribute to the decision-making process, this person or group is highly involved. This level of involvement typically requires researching, reviewing, and formally commenting on public documents; requesting more information or a briefing from key managers; and participating in public meetings to stay current with a project and its potential impact to the environment or public health and safety. People who are highly involved become conversant with the topic, time line, and the "language" of the program and are likely to interact frequently with NSO decision makers.

2.2.3 Opportunities to Become Aware and Informed

Those who are seeking general information regarding NSO EM can utilize a variety of resources. Some public awareness opportunities are available on an ongoing basis, while others are developed in response to a specific project or public demand. The activities are outlined below:

- Request to be added to the **NSO Environmental Management Mailing List**. NSO EM maintains a comprehensive mailing list to disseminate meeting notices and information on EM projects and activities. Names may be added or deleted to the list by contacting the NSO EM Public Involvement Task Manager at (702) 295-2836. Individuals can also be placed on the CAB's mailing list for information on upcoming CAB meetings and/or events. Names may be added or deleted to the CAB's mailing list by contacting the CAB office at (702) 657-9088.

- Browse local and national EM **Internet sites** provided by the DOE. Visit the local NSO site at http://www.nv.doe.gov/emprograms/environment/default.htm or the national EM site at http://www.em.doe.gov/. Additional information may be found on the Nevada Division of Environmental Protection (NDEP) site at http://ndep.nv.gov/.

- Read **fact sheets** and **other materials** that provide information about specific projects and overviews of general NSO EM activities. Copies of these products are available on the Internet at http://www.nv.doe.gov/library/default.htm, at the Nuclear Testing Archive public reading facility, at select Nevada public libraries, or by contacting the NSO EM Public Involvement Task Manager at (702) 295-2836.

- Read the publication, ***EM Update***, which describes NSO EM activities, programs, personnel changes, CAB recommendations, and other related information. The ***EM Update*** is available on the NSO Internet site at http://www.nv.doe.gov/emprograms/environment/public/emupdate.aspx. A notice of new publications is distributed to those on the NSO EM mailing list.

- Read and listen to **news releases** and **public service announcements** that describe achievements, events, workshops, meetings, personnel changes, and other items of interest.

- Request a speaker from the **NSO Speakers Bureau**. Community, academic, civic, and professional groups are encouraged to request a speaker from the NSO staff and/or contractors to learn more about any one of many environmental topics. To request a speaker, contact the Office of Public Affairs at (702) 295-3521.

- Attend **public outreach** events that feature NSO EM exhibits and displays. EM displays can also be requested for use at schools, libraries, conferences, and other special events.

- Take part in an **NTS tour**. Monthly public tours of the NTS are conducted and provide a historical background and information about activities at the NTS. Additional information about the tour, registration and schedules can be found by visiting the NSO Internet site at http://www.nv.doe.gov/nts/tours.htm or by calling (702) 295-0944.

- ***Low-Level and Mixed Low-Level Waste Transportation Routing Reports*** are distributed on a quarterly basis and contain a variety of information including the number of shipments and routes taken to the Nevada Test Site. The reports are available on the NSO Internet site at http://www.nv.doe.gov/emprograms/environment/wastemanagement/quarterlyreports.aspx or by contacting the NSO Transportation Coordinator at (702) 295-4800.

2.2.4 Opportunities to Become Involved

The following opportunities are available for people or organizations seeking to become involved in specific projects or activities:

- Visit and use the **Public Reading Facilities**. The facilities contain complete information on EM Program projects and activities. The reading room locations are provided in Section 4.4.

- Attend **CAB meetings** that highlight specific projects and subjects. Such meetings may also provide interested citizens with updates of ongoing issues, such as budget activities. Visit http://www.ntscab.com for meeting times and dates.

- Provide **public comment and review** of documents such as *National Environmental Policy Act* assessments and plans required by the *Federal Facility Agreement and Consent Order (FFACO)*. A list of FFACO Public Notices and information on how to review documents and submit comments is available on the NSO Internet site at http://www.nv.doe.gov/emprograms/environment/restoration/ffaco.htm.

- Request one-on-one or small **informal meetings and briefings** by EM to receive timely and ongoing information about such topics as the budget process, cleanup activities, or waste shipments to the NTS.

- Become involved in **educational outreach programs** in which NSO participates, such as Operation Clean Desert.

2.2.5 Opportunities to Become Highly Involved

NSO EM provides various opportunities for the public to become involved in the EM decision-making process, often seeking input from the public, where appropriate and feasible to incorporate feedback. Such opportunities arise through participation in workshops, NSO EM stakeholder groups (such as the CAB) and the development of topic-specific stakeholder plans. Whenever possible, NSO EM offers feedback to the public as to the manner in which its input has been used.

- ***Community Advisory Board*** – In 1994, the CAB for Nevada Test Site Programs was officially approved by the U.S. Secretary of Energy. The CAB operates under a national federal charter approved by the Office of Management and Budget and the General Services Administration. As such, it falls under provisions of the *Federal Advisory Committee Act*. The CAB, which is composed of 15 to 20 individuals, was established to enhance public involvement and input-related to NSO EM activities. Membership is open to all Nevada

residents. All meetings are open to the public and the public is strongly encouraged to attend. Liaisons to the CAB include representatives from EM, the State of Nevada, Nye County, and the National Park Service. Requests to be added to the CAB's mailing list should be sent to ntscab@nv.doe.gov or by calling (702) 657-9088.

The CAB provides a convenient and accessible way for individuals or organizations to explore public participation opportunities at all involvement levels. Those wishing to become aware or informed may attend without actively participating in discussions or question and answer sessions. However, those with a keen interest in specific activities or projects may take a more active role in meeting participation or volunteer to be on one of the CAB committees, which focus on such topics transportation, waste disposal, groundwater, and budget prioritization. To submit an application for membership on the CAB, please contact the CAB office at (702) 657-9088 or visit www.ntscab.com.

- ***Public Workshops*** provide a forum for information gathering and dialogue with key decision makers and other groups and organizations. Workshops that address specific issues, such as each fiscal year's scope of work, planning, budget, and project prioritization, provide mechanisms for the public to offer input regarding general programmatic decisions. Notification of such opportunities is sent to individuals who are included on the NSO EM and CAB mailing list.

- ***Stakeholder Involvement Plans*** are produced when specific sub-projects are identified and have been determined to have a greater public interest. These plans contain a description of the sub-project, key dates for project development, and specific opportunities for stakeholders to become highly involved in the issue.

2.3 Regulatory Drivers and Agreements

An essential part of the public involvement strategy is to inform the public about laws, regulations, and agreements affecting environmental management. Whether entered into voluntarily or required by law, agreements provide the basis for much of the work conducted by the NSO.

2.3.1 Federal Facility Agreement and Consent Order

The FFACO of May 1996 is the dominant regulatory driver for NSO EM environmental restoration activities in Nevada. It sets the framework to prioritize specific restoration projects based on risk, agency regulations, and public input. A list of corrective action sites with activities currently in progress can be found in Appendix III of the FFACO. The FFACO also establishes a technical strategy for cleanup activities, maximizes the opportunity to complete multiple corrective actions, and provides for public involvement activities.

Under the FFACO, the NSO and DoD propose priorities and discuss them with State of Nevada representatives who make recommendations. These recommendations are presented to the

public and the CAB for review. Following public input, the State, NSO, and the DoD will develop a final prioritization of corrective action units for investigation and remedial action.

Throughout the corrective action process, documents are written to detail activities needed to ensure the completion of the corrective action, as illustrated in Figure 8. Figure 8 also describes the public involvement and/or information opportunities that arise during the FFACO corrective action process. The public, as shown in the figure, can learn about the availability of these FFACO documents by attending CAB meetings, by visiting the NSO EM Internet website at http://www.nv.doe.gov/emprograms/environment/restoration/ffaco.htm, or by contacting the NSO EM. A brief description of each document is listed below:

- ***Corrective Action Investigation Plan –*** provides or references all specific information for planning investigation activities associated with corrective action units or sites. This document must include or reference the management, technical, quality assurance, health and safety, public involvement, field sampling, and waste management information needed to conduct the investigation.

- ***Corrective Action Decision Document/Corrective Action Plan (CADD/CAP) –*** a document that combines both the results of the Corrective Action Investigation (normally presented in the CADD), and the remediation plan (normally presented in the CAP). The document is developed as a time-saving method when the compliance boundary is well defined, and the remediation alternatives are limited.

- ***Corrective Action Unit Work Plan –*** an optional planning document that provides information for a corrective action unit or collection of units where significant commonality exists. This plan may be developed to eliminate redundant Corrective Action Unit documentation and may contain management, technical, quality assurance, health and safety, public involvement, field sampling, and waste management information. Common information will be referenced in appropriate Corrective Action Investigation Plans.

- ***Corrective Action Decision Document –*** provides a summary of the corrective action investigation and describes the selected remedy and the rationale for its selection, documenting remedial alternatives, ranging from no action to clean closure.

- ***Corrective Action Decision Document/Closure Report –*** a document developed when results from the corrective action investigation indicate that contaminant concentrations are below the level of regulatory concern. The document provides the rationale for no further corrective action and may recommend closure with or without use restrictions or long-term monitoring.

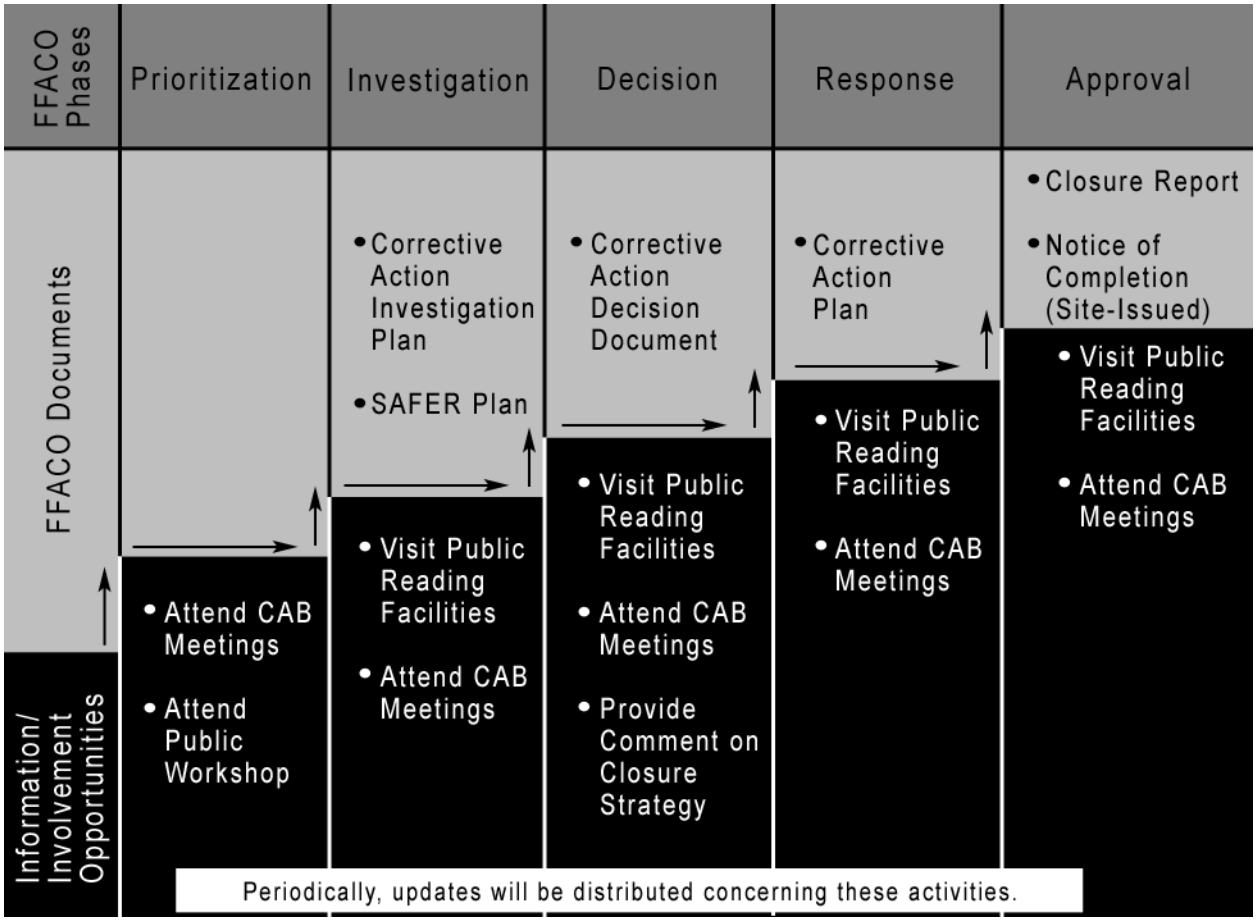

Figure 8 - FFACO Corrective Action Process

- ***Corrective Action Plan –*** prepared when the Corrective Action Decision Document requires a corrective action. The Corrective Action Plan outlines the method for implementing the selected corrective action alternative and explains how the action will be completed.

- ***Streamlined Approach for Environmental Restoration (SAFER) Plan –*** provides a process for initiating and completing corrective actions at units where enough information exists to select the appropriate remedy before completing an investigation. The plan will incorporate the essential elements of the investigation plan, the decision document, and the action plan.

- ***Closure Report –*** verifies that the completed corrective action was conducted in accordance with the approved action plan and provides (to the State) all necessary support data to confirm the appropriate action took place.

- ***Notice of Completion –*** a State-issued document (usually in the form of a letter) signifying the completion of the corrective action in accordance with approved plans.

Various documents associated with the corrective action process are made available in the public reading facilities.

2.3.2 Federal Facility Compliance Act-Consent Order

The *Federal Facility Compliance Act-Consent Order* (FFCAct-CO), an amendment to the *Resource Conservation and Recovery Act* (RCRA), requires preparation of a Site Treatment Plan for the treatment of legacy mixed-radioactive waste. Legacy mixed-radioactive waste streams are subject to the Land Disposal Restrictions standards contained in the RCRA. The State of Nevada signed the *Federal Facility Compliance Act-Consent Order* and approved the *NTS Site Treatment Plan* in March 1996. This Consent Order contains schedules derived from the Site Treatment Plan and identifies specific treatment facilities for treating the identified mixed-waste streams on the NTS. If the NTS complies with the Site Treatment Plan and Consent Order, then it is exempt from fines and penalties for mixed-waste storage prohibitions under the RCRA.

2.3.3 Agreement in Principle/Joint Low-Level Waste Oversight Agreement

The NSO and the State of Nevada entered into an *Agreement in Principle* which is intended to assure the citizens of the State of Nevada that NSO protects the public health and safety as well as the environment through existing programs and commitments. State of Nevada officials validate this effort through a program of independent monitoring and oversight of NSO daily operational activities. An appendix to the Agreement in Principle is the *DOE/NV-State of Nevada Joint Low-Level Waste Oversight Agreement*, a cooperative oversight arrangement between the NSO and the State of Nevada which allows the State an increased role in monitoring the management of low-level and mixed low-level radioactive wastes generated and disposed at the NTS. By entering into the agreement, the NSO and the State agree to share information concerning waste types and quantities in addition to any general information that allows the State to conduct detailed oversight of waste disposal operations.

2.3.4 Other Regulatory Drivers

Throughout EM processes, the NSO is bound by various federal and state laws. Three of these laws (the Resource Conservation and Recovery Act, the Comprehensive Environmental Response, Compensation, and Liability Act, and the National Environmental Policy Act) are highlighted below.

The ***Resource Conservation and Recovery Act*** (RCRA) of 1976 is a comprehensive program for regulating and managing hazardous wastes, nonhazardous solid wastes, underground storage tanks, and for promoting the use of recycled and recovered materials. RCRA sets a federal policy of limiting land disposal of wastes in favor of other disposal methods, and encourages solid waste management practices that promote environmentally sound disposal methods, maximizes the reuse of recoverable resources, and fosters resource conservation. Federal agencies are required to comply with all applicable federal, state, and local RCRA regulations.

The NTS RCRA Part B Permit was renewed by the State of Nevada Division of Environmental Protection in December 2005. This permit regulates the Hazardous Waste Storage Unit, Explosive Ordnance Disposal Unit, and Mixed Waste Disposal unit, all of which are located within the boundaries of the NTS. In 2005, the Mixed Waste Disposal unit section of the permit was changed to allow acceptance of off-site Mixed Low-Level Waste.

The ***Comprehensive Environmental Response, Compensation, and Liability Act*** (CERCLA), as amended by the *Superfund Amendments and Reauthorization Act*, provides for remediation of, and emergency response for, hazardous substances released into the environment and for remediation of hazardous waste sites that present a substantial danger to public health and welfare. Title III, or the *Emergency Planning and Community Right-to-Know Act* of 1986, was added to the *Superfund Amendments and Reauthorization Act* as a free-standing law to address "extremely hazardous substances," and reporting of Occupational Safety and Health Administration-defined "hazardous chemicals." The *Federal Compliance with Right-to-Know Laws and Pollution Prevention Requirements* enacted in 1993 require all federal agencies to comply with certain planning and notification provisions of the *Emergency Planning and Community Right-to-Know Act*. CERCLA is one of the legal authorities that the FFACO is bound by.

The ***National Environmental Policy Act*** (NEPA) was passed in 1969 and requires federal agencies to fully consider and document all environmental consequences before beginning new programs or constructing new facilities. This applies to any activity which affects the government and is funded or approved by a federal agency. The depth of analysis and level of documentation under NEPA are dependent upon the potential for significant environmental impacts resulting from a proposed action and may range up to an environmental impact statement (EIS). An EIS presents a very detailed consideration of a proposed action or program and its potential impacts. For an EIS, NEPA requires a significant amount of public involvement, including public input during the scoping process and public hearings associated with the Draft EIS.

Preparation of the *Environmental Impact Statement for the Nevada Test Site and Other Off-Site Locations in the State of Nevada* (NTS EIS), which examines alternatives for current and future missions at the NSO sites in Nevada, was initiated in August 1994. Approval of the final NTS EIS occurred in the fall of 1996. The Record of Decision for the NTS EIS was issued on December 9, 1996, and describes in detail the decisions reached for operation of the NSO sites and facilities in Nevada. A supplement analysis of the NTS EIS was completed in July 2002 and found that current EM activities were consistent with the 1996 NTS EIS descriptions and analyses. The NSO is currently evaluating the existing NTS EIS and other NEPA documentation

to determine future required actions. A determination and any subsequent analysis will be made in fiscal year 2007.

Generally, for proposed actions for which the severity of environmental impacts are unknown but thought to be insignificant, the agency may prepare a less rigorous level of documentation than the EIS, the environmental assessment (EA). The EA is a concise public document used to determine if a proposed action would, in fact, have significant impacts. If the analyses in the EA demonstrate that potential impacts would be insignificant, the agency may prepare a "Findings of No Significant Impact" and proceed to implement the project. If the EA identifies potentially significant environmental impacts, the agency must then prepare an EIS before implementing an action. Public review requirements for an EA are generally less stringent than for an EIS, and no public hearings are necessary. Final EAs and "Findings of No Significant Impact" are made available to the public and are placed in public reading facilities.

Proposed actions that fit within certain predefined classes of action and meet other rigorous requirements may be considered categorically excluded from further consideration under NEPA. The classes of action that may be considered for a categorical exclusion include those that have no extraordinary circumstances related to the proposal that may affect the significance of the environmental effects of the proposal; are not connected to other actions with potentially significant impacts; are not related to other proposed actions with cumulatively significant impacts; or are not precluded by other regulations. A categorical exclusion is defined as "a category of actions which do not individually or cumulatively have a significant effect on the human environment and which have been found to have no such effect in procedures adopted by a Federal agency in implementation of these regulations." If a proposed action meets all of the requirements, it may be considered categorically excluded and no further analyses or documentation would be required for purposes of NEPA.

Under NEPA, information must be made available to state and federal agencies, potentially affected American Indian tribes, and the public before decisions are made. The NEPA process depends on public involvement which impacts decision making more directly as people take a more hands-on interest in environmental issues.

For more detailed information regarding laws and regulations, contact the librarian at the **Nuclear Testing Archive Public Reading Facility** at (702) 295-1628. Reading rooms are currently located at Southern Nevada Public Reading Facility, c/o Nuclear Testing Archives, 755 East Flamingo Road, Las Vegas, Nevada, 89119 (telephone [702] 295-1628), and at the Northern Nevada Public Reading Facility, Nevada State Library and Archives, 100 N. Stewart Street, Carson City, Nevada, 89701-4285 (telephone [775] 684-3326). Web site information may also be obtained through the reading facilities.

3.0 U.S. Department of Energy Legacy Management

3.1 Legacy Management Overview

Activities of the U.S. Department of Energy (DOE) and predecessor agencies, particularly during the Cold War, left a legacy of environmental impact at more than 100 sites throughout the country. DOE has the responsibility to permanently and safely dispose of the radioactive waste and to protect human health and the environment.

DOE created the Office of Legacy Management (LM) in December 2003 to effectively and efficiently manage the environmental and human legacy issues related to the U.S. Government's Cold War nuclear weapons program for current and future generations. LM's responsibilities include long-term surveillance and maintenance, records management, work force restructuring and benefits continuity, property management, land use planning, stakeholder relations, and community assistance. Sites may be transferred from DOE/EM in order for DOE/LM to perform these responsibilities.

3.2 Offsites

Nine nuclear test sites (collectively called Offsites) in five states were transferred from the DOE Office of Environmental Management to LM in 2006 for long-term surveillance and maintenance. The two Offsites in the state of Nevada are the Central Nevada Test Area (CNTA) and the Shoal Site. A formal Site Transition Plan was created to transition responsibility for the Offsites from EM to LM. The Site Transition Plan included all the information necessary to transfer the Offsites. The Plan was then signed by the Assistant Secretary for EM and the LM Director.

Figure 9 – Offsites Locations

Figure 10 – Shoal Site and Central Nevada Test Area Locations

The Central Nevada Test Area was developed as an alternative location to the Nevada Test Site for subsurface tests of

high-yield nuclear explosive devices. The CNTA is located in the Hot Creek Valley of south central Nevada, about 60 miles northeast of Tonopah. The site is at an elevation of 6,100 feet above sea level and consists of three parcels totaling 2,560 acres. The parcels are spaced about three miles apart from each other along a roughly north-south line. The CNTA is on lands administered by the Bureau of Land Management and the Forest Service and managed by DOE.

An underground nuclear test at the Shoal Site was conducted in 1963 to evaluate granite as a test medium and to determine if seismic waves generated by the explosion could be differentiated from seismic waves generated by naturally occurring earthquakes. No further tests were conducted at the Shoal Site. The site occupies 2,560 acres in the northern part of the Sand Springs Mountain Range in southern Churchill County, western Nevada. The nearest town is Fallon, located 30 miles northwest of the site. The Shoal Site is on land administered by the Bureau of Land Management. A land withdrawal allows DOE and the U.S. Department of Defense (DoD) to manage the site.

3.3 Public Involvement Strategy

DOE continues its public involvement efforts as the focus of the cleanup mission turns to long-term operation, monitoring and maintenance of the sites. The cleanup at DOE sites and the plans for long-term management of the sites have benefited and are expected to continue to benefit from public involvement dialogue among state and federal regulators, stakeholder organizations, elected officials, and members of the general public.

The following resources are available to those who are seeking information about LM:

- Information about LM is available on the LM website at http://www.lm.doe.gov/. The LM website contains information about the LM organization, policies, guidance, reports, and programs.

- The LM Program Update is a quarterly publication that reports news about LM's activities. The LM program Update is available on the LM website at http://www.lm.doe.gov/pro_doc/updates/updates.htm. Individuals can also be added to the LM mailing list to receive the LM Program Update. To add a name to the LM Program Update mailing list, email LM@hq.doe.gov, or fax a request to (202) 586–1540.

- Specific information about CNTA and Shoal sites is available at http://www.lm.doe.gov/land/sites/nv/central/central.htm and http://www.lm.doe.gov/land/sites/nv/shoal/shoal.htm. Information on these web pages includes site records, fact sheets, and a link to the Geospatial Environmental Mapping System (GEMS) for each site.

- Fact sheets and information about the CNTA and Shoal sites are available by contacting Public Affairs at (970) 248-6363 or (970) 248-6000, or by sending an email request to jmiller@lm.doe.gov.

- To request LM documents, fill out the electronic document request form at http://lts1.gjo.doe.gov/forms/documentrequest.cfm.

4.0 Defense Threat Reduction Agency

4.1 DTRA Overview

The Defense Threat Reduction Agency (DTRA) is a U.S. Department of Defense organization with a mission of safeguarding America and its allies from Weapons of Mass Destruction (chemical, biological, radiological, nuclear, and high yield explosives) by providing capabilities to reduce, eliminate, and counter the threat, and mitigate its effects. As a tenant on the DOE's Nevada Test Site (NTS), DTRA and its predecessor agencies (the Defense Nuclear Agency and the Defense Special Weapons Agency) conducted nuclear weapons effects testing on the NTS from 1962 to 1992. Approximately 45 tests were conducted in six different tunnels on the NTS.

4.1.1 DTRA Environmental Restoration

The DTRA Environmental Restoration (ER) Program addresses contamination from the historical DTRA nuclear weapons effects testing at the NTS. The contamination resulted from nuclear testing and related support operations. Contaminants include radioactive materials, unexploded ordnance, gasoline, oils, solvents, and heavy metals such as lead. Major environmental restoration activities include:

- ***Muckpiles*** – Muckpiles were constructed at the portal of each tunnel. Muckpiles may contain:
  - Mining waste rock
  - Construction debris
  - Low-level radioactive waste (generated during re-entry)
  - Hazardous waste (primarily lead)
  - Hydrocarbons
- ***Containment ponds*** – Ponds at four of the tunnels controlled tunnel effluent generated during mining, construction and re-entry.

4.2 Public Involvement Strategy

Those who are seeking information regarding DTRA ER activities can utilize a variety of resources, outlined below:

- Read NSO publications, such as ***EM Update***. The ***EM Update*** has profiled the DTRA ER program in the past and is available on the NSO Internet site at http://www.nv.doe.gov/emprograms/environment/public/emupdate.aspx.
- Read and listen to **news releases** and **public service announcements** that describe DTRA programs, current environmental restoration activities, and other items of interest.

- Take part in an **NTS tour**. Monthly public tours of the NTS are conducted and provide a historical background and information about activities at the NTS. Additional information about the tour, registration and schedules can be found by visiting the NSO Internet site at http://www.nv.doe.gov/nts/tours.htm or by calling (702) 295-0944.

- Visit and use the **Public Reading Facilities**. The facilities contain complete information on DTRA Environmental Restoration projects and activities. The reading room locations are:

    - Nuclear Testing Archives, Nevada State Library & Archives

    - 755 East Flamingo Road, Las Vegas,100 North Stewart Street, Carson City

- Attend **CAB meetings**. Visit http://www.ntscab.com for meeting times and dates.

- Provide **public comment and review** of DoD/DTRA documents required by the *Federal Facility Agreement and Consent Order (FFACO)*. A list of FFACO Public Notices and information on how to review documents and submit comments is available on the NSO Internet site at http://www.nv.doe.gov/emprograms/environment/restoration/ffaco.htm.

5.0 Conclusion

This Plan details the various mechanisms that interested individuals, organizations, and stakeholders can use to gain knowledge about FFACO activities conducted by the NSO. Furthermore, the Plan offers communication techniques that will appeal to people with varying levels of interest. The overall goal of the Plan is to reflect the FFACO parties' commitment to involve the public as projects are developed and decisions are made.

The Plan represents a culmination of comments and suggestions that were offered by the public, and attempts to satisfy those that are most relevant. For the most part, the public is asking for clear, understandable summaries of technical data as well as general background information. Responding to this request, the Plan not only offers clear, concise descriptions of projects, but also details public involvement opportunities and communication channels that can enhance the learning process for the layperson. As FFACO parties strive to accommodate the perspectives of both technical and non-technical audiences, further efforts are being made to include easy-to-read summaries in all documents. In keeping with public requests, the Plan also makes available crucial background data, such as historical and regulatory information, to help the audience relate to the "big picture" or overall program, project, or sub-project objectives.

Public participation, which often provides FFACO parties' with the insight needed to develop programs and prioritize work, is important at every level of the decision-making process. The Plan describes a number of opportunities for the public to become part of that process. FFACO parties update the plan as programs change and as the public identifies ways to make our programs and activities more effective. Please take the time to share your comments with us so that the Plan can continue to reflect your needs.

6.0 References

U.S. Department of Energy, Nevada Operations Office. 1996. Final Environmental Impact Statement for the Nevada Test Site and Off-Site Locations in the State of Nevada, DOE/EIS 0243, August. Las Vegas, NV.

7.0 Contacts

For more information on any of these topics, please contact:

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U.S. Department of Energy
National Nuclear Security Administration
Nevada Site Office
P.O. Box 98518
Las Vegas, NV 89193-8518
(702) 295-2836
snyderk@nv.doe.gov

Community Relations
U.S. Department of Energy Office of Legacy Management
2597 B ¾ Road
Grand Junction, CO 81503
(970) 248-6363
jmiller@lm.doe.gov

Chief, Nevada Operations
Defense Threat Reduction Agency
Nevada Operations
P.O. Box 208
Mercury, NV 89023
(702) 295-7645

Attachment 1: Overview of the Nevada Test Site

History of the Nevada Test Site

For more than 50 years, the primary mission of the Nevada Test Site was to conduct field testing using both nuclear and conventional explosives. NTS was established in 1950 when President Harry Truman authorized the designation of a continental atomic testing area. In addition to weapons tests, areas at the NTS have been utilized for various secondary missions, including neutron and gamma-ray interaction studies; open-air nuclear reactor, nuclear engine, and nuclear furnace tests; hazardous materials spill response testing; and experiments conducted by the U.S. Department of Defense involving radioactive and nonradioactive materials. In the 1950s, atmospheric tests were carried out at the NTS until the Limited Test Ban Treaty went into effect in 1963, ending testing activities in the atmosphere, the oceans, and space. After July 1962, all nuclear tests in the United States were conducted underground, most of them at the NTS. Following a Presidential mandate, nuclear weapons testing was suspended in October 1992, with a stipulation that a readiness posture must be maintained.

To date, there have been 1,054 nuclear tests conducted by the United States, 928 of which were performed at the NTS. These operations generated residual radioactive and hazardous waste that contaminated the surface and subsurface environment. DOE established the Environmental Management Program to address the issue of remediating and disposing of accumulated waste and contamination.

The primary mission of the U.S. Department of Energy, National Nuclear Security Administration Nevada Site Office (NSO) has shifted from nuclear testing to stockpile stewardship. Activities at the NTS also reflect NSO's changing mission. Work conducted at the NTS now focuses on subcritical and other weapons physics experiments, emergency management and test readiness activities, environmental restoration, low-level radioactive waste management, and work for national security organizations and experimental programs. In an effort to further diversify opportunities at the NTS, NSO has developed partnerships with private industry, national laboratories, and other federal, state, and local entities to develop new technologies.

The Environment at the NTS

The NTS is located approximately 65 miles northwest of Las Vegas. Located within the Great Basin, the NTS is home to a diverse and complex mosaic of plant and animal communities representative of both deserts and the transition zone between the deserts. Some 700 species of plants have been found across the NTS. Although extensive surveys over most of the NTS have been conducted, no plants have been identified as threatened or endangered.

Nearly 2,000 types of insects, birds, animals, and reptiles inhabit the NTS. Wild horses range over areas of the NTS. One bald eagle and one peregrine falcon, listed as endangered by the State of Nevada, have been seen on the NTS. The only animal species found on the NTS that is listed as threatened by the State of Nevada and the U.S. Fish and Wildlife Service is the desert tortoise. About eight percent of the NTS has been disturbed by testing and other support activities. The remaining 92 percent supports typical, regional plant, and animal life.

The Nevada Test and Training Range provides a buffer zone on the east, north, and west borders of the NTS and the Bureau of Land Management oversees the land bordering the southern and southwestern boundaries of the NTS. This unpopulated area covers some 5,470 square miles, making it one of the largest contiguous unpopulated land areas in the United States.

Attachment 2: Environmental Management Information Request Form

If you are not currently on the Environmental Management electronic mailing list and would like to receive the *EM Update* and Community Advisory Board meeting announcements, please provide the following information:

Name: _____

Company Name: _____

Street/Box/Apt. No.: _____

City: _____ **State:** _____

Zip: _____

Email: _____

To: Kelly Snyder
Environmental Management
U.S. Department of Energy
P.O. Box 98518
Las Vegas, Nevada 89193-8518

Attachment 3: Environmental Management Product Listing

Environmental Management

- ☐ EM Update publication/newsletter
- ☐ *Environmental Management Public Outreach* brochure
- ☐ *Environmental Management* (Overview)
- ☐ *Environmental Management Speakers Bureau* brochure
- ☐ *Environmental Management: An Overview* video

Environmental Restoration

- ☐ *Environmental Restoration* (Overview) fact sheet
- ☐ *Groundwater Studies & the Underground Test Area Project* video
- ☐ *Groundwater…at the Nevada Test Site* fact sheet
- ☐ *Industrial Sites Project…an Approach to Cleanup* fact sheet
- ☐ *Industrial Sites…a Success Story* fact sheet
- ☐ *Innovation, Remediation, Restoration: "All in a Day's Work for Industrial Sites Workers"* video
- ☐ *Soils Project…an Approach to Cleanup* fact sheet
- ☐ *Tonopah Test Range* fact sheet
- ☐ *Underground Test Area Project Questions and Answers*

Waste Management

- ☐ *Low-Level Waste…at the Nevada Test Site* fact sheet
- ☐ *Mixed Low-Level Waste…at the Nevada Test Site* fact sheet
- ☐ *Radioactive Waste Acceptance Program at the Nevada Test Site* fact sheet
- ☐ *Transporting Low-Level Waste to the Nevada Test Site* brochure
- ☐ *Transuranic Waste…at the Nevada Test Site* fact sheet
- ☐ *Waste Management at the Nevada Test Site* (11/03) video
- ☐ *Radioactive Waste Management* fact sheet
- ☐ *Welcome to the Area 5 Radioactive Waste Management Complex* brochure

Miscellaneous

- ☐ *Federal Facility Agreement and Consent Order* fact sheet
- ☐ *Planning and Budgeting for the Future* fact sheet
- ☐ *Regulatory Requirements and Agreements* fact sheet

Attachment 4: Legacy Management Product Listing

Legacy Management

- ☐ LM Program Update publication/newsletter
- ☐ LM Strategic Plan
- ☐ 2007 LM Strategic Plan Brochure
- ☐ LM Brochure
- ☐ LM Public Outreach Fact Sheet
- ☐ Central Nevada Test Area Fact Sheet
- ☐ Shoal, Nevada, Fact Sheet